

## **CLAIMS**

What is claimed and desired to be secured by Letters Patent is as follows:

1. A method of component-based systems development for producing a computer software application for storing data and accessing, processing, and outputting the data comprising:
  - a. identifying and modeling one or more business processes with one or more steps to each said business process; and identifying business data relating to each step;
  - b. designing and creating one or more independent set of software services with each said service corresponding to a respective business process;
  - c. designing and creating at least one database for storing the business data; said database being shared by said software services;
  - d. using one or more computer software applications to access and process the data through the components; and
  - e. using an interactive electronic terminal to allow a user to access and operate the software applications and access the business data.
2. A method of component-based systems development for producing a computer software application for storing data and accessing, processing, and outputting the data, comprising:
  - a. initiation;
  - b. visualization;
  - c. specification;

- d. design; and
- e. implementation.

3. The method defined in Claim 2 wherein said implementation step includes building and delivering an application.

4. A method of providing data and information comprising:

- a. providing an application by:

- providing a facet,

- providing a hub, and

- accessing the hub from the facet; and

- providing a component by producing computer software for storing data and

- accessing, processing, and outputting the data which comprises steps of identifying

- and modeling one or more business processes with one or more steps to each said

- business process; and identifying business data relating to each step,

- designing and creating one or more independent set of software services with each

- said service corresponding to a respective business process, and designing and

- creating at least one database for storing the business data; said database being

- shared by said software services.

5. The method defined in Claim 4 further including a step of providing a plurality of components.

6. The method defined in Claim 5 further including a step of providing communication between the hub and each of the plurality of components.
7. The method defined in Claim 6 further including a step of providing a plurality of hubs.
8. The method defined in Claim 7 further including a step of providing communication between each hub and each component.
9. The method defined in Claim 1 wherein the step of identifying business data further includes a step of using legacy systems.
10. The method defined in Claim 9 wherein the step of using legacy systems further includes a step of modularizing each legacy system.
11. A method of performing computer-based system development using only data from a known project.
12. The method defined in Claim 11 further including a step of visualization which includes a step of developing application slices.
13. The method defined in Claim 12 further including a step of identifying legacy systems.

14. The method defined in Claim 13 further including a step of specification.
15. The method defined in Claim 14 further including a step of design which includes modularizing legacy systems.
16. The method defined in Claim 15 further including a step of insulating legacy systems.
17. The method defined in Claim 16 further including a step of implementation.
18. The method defined in Claim 17 further including a step of providing a facet.
19. The method defined in Claim 18 further including a step of providing a hub communicating with the facet.
20. The method defined in Claim 19 further including a step of providing a component communicating with the hub.
21. The method defined in Claim 20 further including a step of providing a plurality of components and further including a step of establishing communication between each of the components and the hub.

22. The method defined in Claim 21 further including a step of providing a plurality of components and further including a step of establishing communication between each of the components and one or more hubs.
23. The method defined in Claim 22 further including a step of providing each component with one or more services.
24. The method defined in Claim 23 further including a step of having each service represent an end result.
25. The method defined in Claim 22 further including a step of separating some components from other components.
26. The method defined in Claim 12 further including a step of defining each application slice to contain a single component.
27. The method defined in Claim 15 further including a step of insulating modularized systems.
28. The method defined in Claim 17 wherein the step of insulating the modularized systems further includes a step of providing a wrapper to encapsulate each modularized system.

29. The method defined in Claim 28 further including a step of accessing modularized legacy systems via external action blocks.

30. A method of component-based systems development comprising:

- providing a plurality of facets;
- providing a plurality of hubs;
- establishing communication between each hub and one of the plurality of facets;
- providing a plurality of components;
- establishing communication between each component and each hub; and
- producing computer software for storing data and accessing, processing and outputting data by producing a computer software application for storing data and accessing, processing and outputting data and which comprises the steps of:
  - identifying and modeling one or more business processes with one or more steps to each said business process and identifying business data relating to each step,
  - designing and creating one or more independent set of software services with each said service corresponding to a respective business process, and
  - designing and creating at least one database for storing the business data; said database being shared by said software services.

31. The method defined in Claim 30 further including a step of wherein the step of producing computer software includes using only data from a known project.

32. The method defined in Claim 31 further including a step of providing each component with a plurality of services.

33. The method defined in Claim 32 wherein the step of identifying business data further includes a step of using legacy systems.

34. The method defined in Claim 33 wherein the step of using legacy systems further includes a step of modularizing each legacy system.

35. The method defined in Claim 34 further including a step of visualization which includes a step of developing application slices.

36. The method defined in Claim 35 further including a step of modularizing legacy systems.

37. The method defined in Claim 36 further including a step of insulating legacy systems.

38. The method defined in Claim 2 further including a step of developing a class diagram.

39. The method defined in Claim 38 further including a step of freezing the class diagram during specification.

40. The method defined in Claim 39 further including a step of developing detailed requirements for an application during specification.
41. The method defined in Claim 14 further including a specification step.
42. The method defined in Claim 41 further including defining a slice during specification.
38. The method defined in Claim 30 wherein the step of producing computer software includes using only data from a known project.